

## AMENDMENTS TO THE CLAIMS

1-11 (Canceled).

12. (Currently Amended) A method of fabricating an optical semiconductor device, comprising:

~~the first step of forming an optical semiconductor element on a semiconductor substrate;~~

~~the second step of forming a semiconductor region having walls opposing said optical semiconductor element and essentially surrounding said optical semiconductor element; and~~

~~the third step of forming a buried layer by vapor phase epitaxy between the walls of said semiconductor region and said optical semiconductor element,~~

~~wherein in the second step a distance between the wall of said semiconductor region and a side wall of said optical semiconductor element is larger~~ greater in a first region than in a second region, the first region having a higher vapor phase epitaxy growth rate in a horizontal direction than the second region. in a portion in which a growth rate of the vapor phase epitaxy in a horizontal direction from the side wall of said optical semiconductor element and the wall of said semiconductor region is higher.

13. (Original) A method according to claim 12, wherein said buried layer is formed by vapor phase epitaxy using one of a chloride-based source gas and a hydride-based source gas.

14. (Currently Amended) A method according to claim 12, further comprising:  
~~the steps of forming trenches in a predetermined region of said semiconductor region before the third step~~ forming the buried layer, said trenches being buried with said buried layer ~~in the third step~~, and

~~the step of forming an electrode to be connected to said optical semiconductor element on said trenches via an insulating film.~~

15. (Currently Amended) A method according to claim 14, wherein said trenches are wider in ~~a portion~~ a third region in which a growth rate in a horizontal direction from side walls of said trenches is higher than in a fourth region.

Claims 16-18 (Canceled).